

Reviewer's report

Title: Beverage consumption habits "24/7" among British adults: association with total water intake, energy intake and physical activity.

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Reviewer: Elizabeth A Dennis

Reviewer's report:

This article was an interesting report on British beverage consumption habits. Many reports have produced information related to American beverage patterns, but few have reported on the British population. This is a very timely topic given the associations with obesity, chronic disease and energy containing beverages; however, there is a previously published manuscript looking at beverage intake and patterns among British adults and children that includes a larger sample size and reports similar data for 2000/1 in the appendices related to total water intake. This manuscript also includes details on purchasing habits. Nonetheless, I've included some suggestions which I feel would strengthen the current manuscript prior to publication.

Major Compulsory Revisions:

1. Title/Introduction- hydration is discussed in the introduction but there are no markers of hydration mentioned throughout the methods other than beverage/fluid intake. If the purpose is to explore associations between beverages and energy intake, the introduction should include more studies on beverage and energy intake vs hydration.
2. The paper would be strengthened by including demographic information on the sample. It is stated in the methods that anthropometric data and blood samples were collected but there is no data presented.
3. Gram weight of beverage consumption is presented in the tables, but energy (kcal) contribution of beverages is not as clear. It would be helpful to see the energy presented in the tables along with the gram weight of beverages consumed (similar to discussion).
4. Methods: Bottled water was coded separately from tap water, but there are multiple instances where the general term water intake is used. If these were combined at any point, it should be stated and consistent within the text. It is confusing because the authors jump between the terms water intake and TWI.
5. Timing of beverage consumption was examined, but sugar/milk added to hot beverages was unaccounted for in the analysis. If milk, cream, or sugar was consumed at the same time as the coffee and tea, couldn't you assume they were part of the tea and coffee?
6. The introduction and discussion do not fully explore prior literature within this

field. See point above about hydration. What could be some differences between beverage consumption patterns between American and British adults? The consumption of sugar sweetened beverages seems much lower in British adults according to these results, whereas Ng et al (2011) reported that per capita purchases of these beverages have increased.

7. The discussion does not highlight or touch upon the results of physical activity (an objective stated in the first paragraph of the introduction and included in the title). What can be suggested from these results?

Minor Essential Revisions

1. Throughout the manuscript the total water intake AI for men and women is reversed and inconsistent. (5th paragraph under data preparation and analysis, results combined classification for low vs high water intake paragraph).

2. 6th paragraph under Data preparation and analysis: The first line "In the approach is adopted by the Nordic..." is unclear.

3. 1st paragraph under "Methods, The Survey", citation did not format correctly.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests